



EVALUATION

Local Small Disadvantaged Business Enterprise Program: Cost Effectiveness and Financial Impact Analysis

December 2002

Submitted to:
District of Columbia
Office of Local Business Development

Submitted by:
Mason Tillman Associates, Ltd.



MASON TILLMAN
ASSOCIATES, LTD

***LOCAL SMALL
DISADVANTAGED BUSINESS
ENTERPRISE PROGRAM:***

***COST EFFECTIVENESS AND
FINANCIAL IMPACT ANALYSIS***

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LOCAL SMALL DISADVANTAGED BUSINESS ENTERPRISE PROGRAM: COST EFFECTIVENESS AND FINANCIAL IMPACT ANALYSIS

I. INTRODUCTION

Washington D.C.'s Office of Local Business Development (OLBD) commissioned Mason Tillman Associates to perform an evaluation of its Local, Small, and Disadvantaged Business Enterprises (LSDBE) program. As required under D.C. Law 12-268, also known as the "Equal Opportunity for Local, Small, and Disadvantaged Business Enterprises Act of 1998" (the Act), the LSDBE program must be independently evaluated every three years.

The evaluation has three main purposes: (1) to assess and quantify the differential costs of awards to LSDBEs; (2) to assess and quantify the economic outcomes of the program on the District of Columbia's (District's) tax base, local employment, and other economic indicators; and (3) to determine the LSDBE program's strengths and weaknesses and recommend improvements. This report studied the period October 1, 1999 through September 30, 2001.

The evaluation methodology included both qualitative and quantitative analyses. An economic analysis model was used to calculate the quantitative public costs and benefits resulting from the program. The analysis traced spending through the marketplace and measured the cumulative effects of that spending on the District's economy.

The qualitative analysis evaluated the range of the OLBD's business development services and identified factors that would contribute to business growth. Staff and managers of the OLBD and the Office of Contracting and Procurement were interviewed and surveyed. The purpose of this research was to develop an understanding of the operation of the LSDBE program and to solicit feedback and recommendations for program improvement. A focus group was held with LSDBEs to identify the program's success areas, where improvements are needed, and to determine the effect LSDBEs perceive the program has had on their businesses.



II. SUMMARY OF THE LOCAL SMALL DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

The Equal Opportunity for Local, Small, and Disadvantaged Business Enterprises Act of 1998 (D.C. Law 12-268) established the LSDBE program. What follows is a summary of the main provisions of the Act.

A. The Office of Local Business Development

The Office of Local Business Development monitors District government agency compliance with the Equal Opportunity for Local, Small, Disadvantaged Business Enterprises Act of 1998. The OLBD's mission is to foster economic growth and the development of Local, Small, Disadvantaged Business Enterprises. The OLBD offers a variety of services to assist LSDBEs with business development, including business certification, assistance with LSDBE applications, compliance monitoring, and local business advocacy.

The OLBD has a staff of ten full-time employees to administer the LSDBE program. The three main units of the OLBD are certification, compliance, and business development. The OLBD interfaces with District departments to set LSDBE goals, identify contracts for set asides, and monitor LSDBE goal attainment. The OLBD works with the Office of Contracting and Procurement to identify opportunities for LSDBEs and conduct outreach.

The OLBD is responsible for reviewing the District's affirmative action plans as mandated in Mayoral Executive Order 85-85. Mayoral Executive Order 85-85 mandates 42 percent minority and 6.9 percent women labor force participation on District construction contracts of \$25,000 or greater. The OLBD monitors construction contracts for compliance with 85-85.

B. LSDBE Definition

The Act targets benefits to three types of businesses: local business enterprises, small business enterprises, and disadvantage business enterprises.

1. Local Business Enterprise

A Local Business Enterprise is a firm with its principal office in the District. It is licensed by the District and subject to District taxes.



2. Small Business Enterprise

A Small Business Enterprise is a local business or a business enterprise that satisfies the requirements established in §217.05.¹ The business must be independently owned, operated, and controlled. It must have average annual gross receipts not exceeding the limits outlined in Table 1.

Table 1 Small Business Enterprise Size Standards

Construction	Average Annual Gross Receipts
Heavy (streets, highways, bridges, etc.)	\$23 million
Building (general construction, etc.)	\$21 million
Specialty Trades	\$13 million
Goods and Equipment	\$8 million
General Services	\$19 million
Personal (hotel, beauty, laundry, etc.)	\$5 million
Business Services	\$10 million
Health and Legal Services	\$10 million
Health Facilities Management	\$19 million
Manufacturing Services	\$10 million
Transportation and Hauling Services	\$13 million
Financial Institutions	\$300 million

3. Disadvantaged Business Enterprise

A Disadvantaged Business Enterprise is a business that is 51 percent or more owned by individuals that are both socially and economically disadvantaged. To be eligible for Disadvantaged Business Enterprise certification, the firm must demonstrate its social and economic disadvantage status.



¹ D.C. Code §2-217.05 outlines the functions of the Local Business Opportunities Commission.

a. Social Disadvantage

Socially disadvantaged individuals are members of a particular group who have faced ongoing prejudice due to their identity without regard to their qualities as individuals. Evidence of social disadvantage is as follows:

- Documentation proving membership of a group;
- Documentation proving isolation from mainstream American society because of membership in a group; and
- Documentation proving maltreatment because of membership in a group.

b. Economic Disadvantage

Economic disadvantage is defined as diminished opportunities that have precluded an individual from successful competition in the open marketplace. Economic disadvantage is evidenced by:

- The personal financial condition of the owner(s);
- The financial condition of the firm; and
- The applicant's limited access to credit, or capital.

C. LSDBE Certification Process

The Local Business Opportunity Commission (LBOC) certifies a firm's status as a Disadvantaged Business Enterprise, Local Business Enterprise, and/or Small Business Enterprise. The OLBD reviews certification applications to determine eligibility. Site visits may be conducted to LBOC verify submitted information. Completed applications are submitted by the OLBD to the for approval. The certified LSDBEs are listed on the OLBD Web site, which is updated monthly.

D. LSDBE Goals

Each agency of the District, including those agencies that procure through the Office of Contracting and Procurement, is required to spend 50 percent of its expendable budget with LSDBE firms, unless otherwise determined by the OLBD. The expendable budget is calculated as an agency's operating cost minus spending for capital improvements, rents or leases, insurance, utilities, grants, payments, and payroll. Certain procurement items that are not manufactured or sold in the District or funded by the federal government may be exempt from the expendable budget.

LSDBE goals apply only to local appropriations. Federal funds are not included in an agency's expendable budget.



E. The Industrial Revenue Bonds Program

The District offers private developers Industrial Revenue Bonds. The program is a low interest loan to developers and non-profit organizations for capital projects in the District. The OLBD staff negotiates a Memorandum of Understanding with bond recipients to ensure use of their best efforts to achieve 35 percent LSDBE participation on their projects.

F. Bid Preferences

Agencies, in evaluating bids and proposals, award preferences to LSDBEs. A bid or proposal from a qualified business enterprise may be entitled to any or all of the preferences. In the case of proposals, points are awarded as follows.

- Three points for resident business ownership.
- Four points for local business enterprises.
- Two points for businesses located in enterprise zones.
- Three points for disadvantaged business enterprises.

In the case of bids, a percentage reduction in price is given as follows.

- Three percent for resident business ownership.
- Four percent for local business enterprises.
- Two percent for businesses located in enterprise zones.
- Three percent for disadvantaged business enterprises.

G. LSDBE Set Asides

The set-aside program is limited to small business enterprises with gross revenues of \$1 million or less. A business becomes ineligible for participation in the set-aside program when its gross revenues exceed \$1 million for two consecutive years.

There is also a set-aside program for local, small, and disadvantaged business enterprises for the Blanket Order Blitz² at the contract level.

Contracts set aside for small businesses are limited to competition among LSDBEs. If two or more LSDBEs are available to provide the service for a contract, then the contract can be set aside.

² Blanket Order Blitz refers to a program established by the Office of Contracting and Procurement to award requirement contracts, indefinite quantity contracts, or blanket purchase agreements for the provision of goods or services (including construction services) to more than one agency or to multiple sub-units of the same agency.



H. Quarterly Reporting

Each agency is required to provide quarterly reports to the Office of Local Business Development within 30 days of each quarter's end. The agency report must stipulate the following.

- The means by which it intends to achieve the LSDBE goal during the subsequent 12 months;
- The dollar percentage of all contracts and subcontracts it has awarded to LSDBEs during the quarter; and
- A description of its past and current activities to achieve the 50 percent LSDBE goal.

The OLBD must prepare a semi-annual report on the LSDBE program activities for the District's City Council.

I. Council Review of Goals

Upon receipt of a semi-annual LSDBE program report, the District's City Council reviews goal attainment and the mandated program elements and considers appropriate amendments. Every three years the Council reviews the goals, intent, and purpose of the law to assess the continued need for the local, small, and disadvantaged business enterprise programs. The LBOC submits the results of an independent evaluation of the LSDBE program to the Mayor and Council.

J. Assistance Programs For LSDBES

The OLBD fosters technical development services for local, small, and disadvantaged business enterprises through forums, community meetings, and outreach efforts with strategic partners. The OLBD does not directly provide technical assistance, but refers LSDBEs to the following community-based organizations:

- The US Small Business Administration Washington District Office;
- The Howard University Small Business Development Center; and
- The Greater Washington Board of Trade.

The OLBD hosts community awareness meetings and participates in ongoing market promotion. It conducts business seminars, conferences, exhibits, and outreach forums throughout the calendar year, and notifies LSDBE program participants of various procurement opportunities and technical assistance programs that are available outside the District government.

The OLBD hosts monthly meetings between LSDBEs and agency procurement officers. These sessions rotate between the OLBD offices and sites in the local community. This year the OLBD hosted its second annual LSDBE Marketplace at the Washington Convention Center. In a unique



approach to a procurement fair, LSDBE firms were the exhibitors while District procurement officers and other public and private buyers were the attendees.

III. LSDBE UTILIZATION

This study reviewed the utilization of LSDBEs by 58 District agencies between October 1, 1999 and September 30, 2001. The analyzed contract data was provided in electronic format. There were three different sources for LSDBE utilization data.

- Award records from the Office of Contracting and Procurement. (OCP data set)

OCP collects agency award data for purchases made on the behalf of District agencies. OCP contract records were provided for 13 agencies.

- Quarterly goal attainment reports submitted to OLBD by the District agencies. (Quarterly Report data set)

Agencies submit quarterly reports of the LSDBE goal attainment to OLBD. OLBD provided a summary of the quarterly reports for 53 agencies. It was determined that these reports captured spending with LSDBEs including procurement funded by the expendable budget, federal dollars and other sources.

- LSDBE contract payments submitted to OLBD by the District agencies and verified with the Office of the Chief Financial Officer (LSDBE Payment data set).

OLBD collects contract information on LSDBE contracts from the agencies quarterly. Annually, this information is reconciled with payment records maintained by the Office of the Chief Financial Officer. Like the agency reports, this data includes all LSDBE expenditures and does not differentiate between those funded by the agency's expendable budget and other sources. This data set included contracts records from 62 agencies. However, it was also determined that this data did not include some awards made to LSDBEs that were captured in the OCP data set.

Because this data represents verified payments to LSDBE during the study period, it was used as the data source for the IMPLAN economic analysis.

A. Agency Goal Attainment

From the Quarterly Report data set, there were 53 District agencies that set LSDBE goals based on their expendable budgets. Each of these agencies reported quarterly the awards and payments



they made to LSDBEs. However, the reported spending was not limited to awards made with funds from their expendable budget. It was also determined that this data did not include some LSDBE awards that were made directly by the Office of Contracting and Procurement. Additionally, both the quarterly data provided to OLBD by the agencies and the Office of Contracting and Procurement data included LSDBE expenditures without differentiating between contracts funded by an agency's expendable budget and those from other funding sources. Therefore, it is not possible to measure if an agency reporting LSDBE spending equal to or greater than the required 50 percent goal actually met or exceeded the required 50 percent expenditure from funds in their expendable budget. However, it was possible with the reported contract data to determine the agencies which did not spend 50 percent of their expendable budget during the study period.

It should be noted that the Washington Convention Center and the Water and Sewer Administration are independent agencies and not required to set LSDBE goals or report LSDBE attainment. However each of these agencies did report their LSDBE spending. Table 2 depicts the awards made to LSDBEs by the three independent agencies.

Table 2 Independent Agencies LSDBE Contract Awards: October 1, 1999 to September 30, 2001

Independent Agency	LSDBE Contract Awards
Washington Convention Center Authority	\$2,074,278
Water and Sewer Administration	\$130,219,054
U.S. Army Corp of Engineers	\$56,577,000

Table 3 depicts the 26 agencies that failed to meet the aggregate LSDBE goal during the study period.



Table 3 Summary of LSDBE Goal Attainment: October 1, 1999 to September 30, 2001

Agency	LSDBE Goal FY 2000	LSDBE Goal FY 2001	Contract Awards FY 2000	Contract Awards FY 2001
Banking & Financial Institutions	\$137,713.50	\$120,715.00	\$95,577.50	\$79,169.55
Board of Appeals & Review		\$31,000.00		\$24,231.06
Board of Elections & Ethics	\$582,500.00	\$367,586.50	\$93,082.12	\$25,850.77
Chief Financial Officer	\$14,750,500.00	\$7,143,159.00	\$6,255,329.72	\$1,815,139.89
D.C. General Hospital	\$19,382,500.00		\$1,665,146.67	
D.C. Health & Hospitals, PBC		\$4,000,163.50		\$745,982.51
D.C. Public Library	\$627,127.50	\$1,064,690.50	\$87,914.86	\$685,158.32
D.C. Public Schools	\$25,100,500.00	\$13,541,754.00	\$22,631,936.93	\$13,254,364.80
Department of Corrections	\$7,828,000.00	\$5,560,066.50	\$7,303,646.50	\$6,488,465.43
Department of Employment Services	\$7,271,750.00	\$999,820.50	\$665,082.74	\$1,359,291.21
Department of Fire & Emergency Services	\$3,400,000.00	\$1,337,245.50	\$1,239,332.86	\$1,489,732.69
Department of Parks & Recreations	\$2,094,500.00	\$1,787,033.50	\$1,153,085.35	\$2,683,527.00
Deputy Mayor, Planning & Economic Development	\$720,381.00	\$178,717.00	\$200,718.60	\$180,638.36
Insurance and Securities Regulations		\$165,500.00		\$94,447.59
Lottery & Charitable Games Control Board	\$10,153,500.00	\$8,217,900.00	\$8,560,769.59	\$8,983,586.00
Metropolitan Police Department	\$6,931,447.50	\$5,816,578.00	\$6,391,813.65	\$6,372,049.10
Motion Picture & Television Development	\$72,250.00	\$28,398.00	\$16,413.38	\$24,482.15
Office of the Auditor	\$65,890.50	\$27,988.00	\$11,243.00	\$28,398.00
Office of Corporation Counsel	\$120,000.00	\$1,492,366.00	\$77,093.58	\$244,515.81
Office of Housing & Community Development	\$2,843,000.00	\$780,799.50	\$1,137,640.79	\$1,721,938.59
Office of Planning	\$233,000.00	\$259,808.00	\$99,815.66	\$184,957.55

Table 3 Summary of LSDBE Goal Attainment: October 1, 1999 to September 30, 2001

Agency	LSDBE Goal FY 2000	LSDBE Goal FY 2001	Contract Awards FY 2000	Contract Awards FY 2001
Office of Property Management	\$9,270,500.00	\$12,173,202.50	\$8,146,890.81	\$12,081,285.39
Office of the Secretary	\$48,065.50	\$132,939.50	\$52,137.45	\$81,562.50
Public Service Commission	\$607,833.00	\$227,179.00	\$140,644.00	\$39,397.82
Taxicab Commission	\$37,000.00	\$49,000.00	\$4,792.78	\$18,074.86
Tuition Assistance Program	\$434,858.00	\$388,880.50	\$152,529.00	\$216,904.05

Notes:

Department of Corrections met their goal in FY 2001
 Department of Employment Services met their goal in FY 2001
 Department of Fire & Emergency Services met their goal in FY 2001
 Department of Parks & Recreation met their goal in FY 2001
 Department of Public Works met their goal in FY 2000 and FY 2001
 Deputy Mayor, Planning and Economic Development met their goal in FY 2001
 Housing & Community Development met their goal in FY 2001
 Lottery And Charitable Games met their goal in FY 2001
 Metropolitan Police Department met their goal in FY 2001
 Motion Picture & Television Development met their goal in FY 2001
 Office of Contracting & Procurement met their goal in FY 2000 and FY 2001
 Office of Secretary met their goal in FY 2000

B. Size of Contracts Awarded

Most of the contracts awarded were small. Combining the unique records in the OCP data set and the Quarterly Reports data set, a total of 3966 contracts were awarded to LSDBEs was identified. This total includes all reporting agencies, including the three independent agencies mentioned above. As depicted in Table 4, 77.38 percent of the contracts were less than \$25,000.

Table 4 LSDBE Contracts by Size: October 1, 1999 to September 30, 2001

Size	Number of Contracts	Percent of Contracts
\$1 - \$24,999	3069	77.38%
\$25,000 - \$49,999	269	6.78%
\$50,000 - \$249,999	404	10.19%
\$250,000 - \$499,999	71	1.79%
\$500,000 - \$999,999	79	1.99%
\$1,000,000 and greater	74	1.87%
Total	3966	100.00%

Less than five percent of the contracts awarded to LSDBEs were greater or equal to \$250,000. Table 5 below list the agencies which awarded one or more contracts greater than or equal to \$250,000.

Table 5 LSDBE Awards by Agency-\$250,000 and Greater October 1, 1999 to September 30, 2001

Size	Agency	Number of Contracts	Percent of Contracts
\$250,000 - \$499,999	Chief Financial Officer	2	0.89%
\$250,000 - \$499,999	DC General Hospital	1	0.45%
\$250,000 - \$499,999	DC Housing Authority	1	0.45%
\$250,000 - \$499,999	DC Lottery Board	1	0.45%
\$250,000 - \$499,999	DC Public Schools	6	2.68%
\$250,000 - \$499,999	Department of Correction	1	0.45%
\$250,000 - \$499,999	Department of Employment Services	1	0.45%
\$250,000 - \$499,999	Department of Fire and Emergency Services	1	0.45%
\$250,000 - \$499,999	Department of Public Works	5	2.23%
\$250,000 - \$499,999	Department of Recreation and Parks	1	0.45%
\$250,000 - \$499,999	Health Department	2	0.89%
\$250,000 - \$499,999	Human Services Dept	5	2.23%
\$250,000 - \$499,999	Metropolitan Police	10	4.46%
\$250,000 - \$499,999	Office of Aging	1	0.45%
\$250,000 - \$499,999	Office of Housing and Community Development	2	0.89%
\$250,000 - \$499,999	Office of Inspector General	1	0.45%
\$250,000 - \$499,999	Office of Personnel	2	0.89%



Table 5 LSDBE Awards by Agency-\$250,000 and Greater October 1, 1999 to September 30, 2001

Size	Agency	Number of Contracts	Percent of Contracts
\$250,000 - \$499,999	Office of Property Management	1	0.45%
\$250,000 - \$499,999	Office of the Chief Technology Officer	11	4.91%
\$250,000 - \$499,999	U. S. Army Corps of Engineers	1	0.45%
\$250,000 - \$499,999	Water and Sewer Administration	15	6.70%
\$500,000 - \$999,999	DC Health & Hospitals	1	0.45%
\$500,000 - \$999,999	DC Public Schools	6	2.68%
\$500,000 - \$999,999	Department of Correction	1	0.45%
\$500,000 - \$999,999	Department of Public Works	8	3.57%
\$500,000 - \$999,999	Department of Recreation and Parks	1	0.45%
\$500,000 - \$999,999	Health Department	4	1.79%
\$500,000 - \$999,999	Metropolitan Police	1	0.45%
\$500,000 - \$999,999	Mission Support Center	1	0.45%
\$500,000 - \$999,999	Office of Cable Television	1	0.45%
\$500,000 - \$999,999	Office of Contracts and Procurement	1	0.45%
\$500,000 - \$999,999	Office of Housing and Community Development	1	0.45%
\$500,000 - \$999,999	Office of Personnel	2	0.89%
\$500,000 - \$999,999	Office of Property Management	4	1.79%
\$500,000 - \$999,999	Office of the Chief Technology Officer	13	5.80%
\$500,000 - \$999,999	U. S. Army Corps of Engineers	1	0.45%
\$500,000 - \$999,999	University of the District of Columbia	1	0.45%
\$500,000 - \$999,999	Washington Convention Center	2	0.89%
\$500,000 - \$999,999	Water and Sewer Administration	30	13.39%
\$1,000,000 and greater	DC Public Schools	6	2.68%
\$1,000,000 and greater	Department of Correction	2	0.89%
\$1,000,000 and greater	Department of Public Works	6	2.68%
\$1,000,000 and greater	Health Department	9	4.02%
\$1,000,000 and greater	Human Services Dept	4	1.79%
\$1,000,000 and greater	Lottery and Charitable Games Control	1	0.45%
\$1,000,000 and greater	Office of Aging	1	0.45%
\$1,000,000 and greater	Office of Mayor	1	0.45%
\$1,000,000 and greater	Office of Personnel	1	0.45%
\$1,000,000 and greater	Office of Property Management	6	2.68%
\$1,000,000 and greater	Office of the Chief Technology Officer	4	1.79%
\$1,000,000 and greater	U. S. Army Corps of Engineers	10	4.46%
\$1,000,000 and greater	Water and Sewer Administration	23	10.27%
TOTAL		224	100.00%

Source: LSDBE Payment data set



When excluding the independent agencies, which awarded many large contracts, it is evident that an overwhelming majority of the LSDBE contracts are small. As depicted in Table 6, 80.05 percent of the were less than \$25,000.

Table 6 LSDBE Contracts by Size, Excluding Independent Agencies: October 1, 1999 to September 30, 2001

Size	Number of Contracts	Percent of Contracts
\$1 - \$24,999	2648	80.05%
\$25,000 - \$49,999	222	6.71%
\$50,000 - \$249,999	303	9.16%
\$250,000 - \$499,999	50	1.51%
\$500,000 - \$999,999	40	1.21%
\$1,000,000 and greater	45	1.36%
Total	3308	100.00%

IV. ECONOMIC OUTCOMES: DIRECT EFFECTS

A. Assumptions

Bid discounts are price reductions granted to LSDBEs. Although the price is reduced for consideration of award, the actual bid price is the contract amount. In other words, if a contractor is given a 12 percent bid discount on a \$10,000 bid for award consideration, the bid amount will be \$8,800. The actual contract award to be paid to the contractor will be \$10,000. Thus, it is assumed that contracts awarded with a bid discount incurred the additional cost of the discount as opposed to contracts awarded strictly based on the lowest bid.

Bid discounts are only applied to competitively bid contracts, namely for construction and goods and services. Evaluation credits are granted on contracts where the awards are based on points scored. Therefore, only construction and goods and services contracts could be analyzed for a cost differential.

It should also be noted that a range of bid discounts are offered to LSDBEs depending on their certification. The minimum bid discount a firm can receive is two percent for being certified as an enterprise zone business. The maximum bid discount a firm can receive is 12 percent for being certified as a local disadvantaged business with a resident business owner located in an enterprise zone.

Given the above assumptions, a cost differential analysis should adhere to the following parameters:

- If all LSDBE contractors received the minimum bid discount of two percent; or
- If all LSDBE contractors received the maximum bid discount of 12 percent.



B. Cost Differential

Because LSDBE payment data includes contracts funded from sources other than the expendable budget, a cost differential analysis could not be performed. It is presumed that bid discounts are applied only to contracts funded by agencies with an expendable budget. To apply a cost differential analysis to other funding sources would overstate the fiscal impact of the LSDBE program to the District's budget.

C. LSDBE Program Cost

The total budget for the OLBD during the study period was \$1,467,963. This represents the administrative cost for certifying LSDBEs, tracking agency compliance and LSDBE utilization, and the other services the OLBD provides for the LSDBE program.

V. ECONOMIC OUTCOMES: INDIRECT EFFECTS

Impact Analysis for Planning (IMPLAN) determines the impact that contracting with LSDBEs has on the local economy. IMPLAN is a proprietary PC Windows-based system for regional economic analysis of states, regions, and communities. The regional accounts generated by IMPLAN include investment, trade flow, commodity production and consumption, and capital accounts.

For this study, the contracts awarded to participants in the LSDBE program were analyzed. These contracts were classified by two-digit Standard Industrial Classification (SIC) codes and grouped by award year. Using this information, estimates were made of the direct, indirect, induced, and total economic effects of the additional business. These estimates derived total output, total employment, total value added, employee compensation, proprietors' earnings, indirect business taxes, and other property from income, profits, dividends, and rents. In addition, the value of direct taxes on the program participants' income was estimated.

A. Concepts and Terminology

Direct effects are the values for the initial changes in final demand for goods and services procured by the District of Columbia government under the LSDBE program.

Indirect effects are the changes in output (equivalent to gross sales), jobs, and income by the suppliers of goods and services in the District to the LSDBE contract awardees. This measures the replacement of inventory drawn down to supply the initial contracts as well as any expansion of operations due to the stimulus of the additional business from the awardees.



Induced effects are the impacts on the local economy resulting from households and institutions that receive income from the establishments comprising the direct and indirect impact stages. This is mainly the consumption spending out of wages and salaries earned by employees of the direct and indirect stage businesses in fulfilling the LSDBE contracts, which, in turn, sets off rounds of additional spending in, mainly, the retail trade and services sectors.

The indirect and induced stages of the impact process, often called *secondary* impacts, are a multiple of the initial direct effect. The difference between the value of the direct effect and the cumulative total value is termed the *multiplier effect*.

The concept *Value Added* measures the real contribution of the program to the District economy. Value Added is the sum of labor income (employee compensation plus proprietors' earnings), other property-type income (mainly corporate earnings, rental income, and corporate transfers), and indirect business taxes (mainly sales taxes, property taxes, and miscellaneous municipal fees). The difference between Value Added and Total Output is the value of intermediate goods (e.g., raw and semi-processed materials) incorporated by establishments producing goods and services for final consumption.

B. Modeling Approach

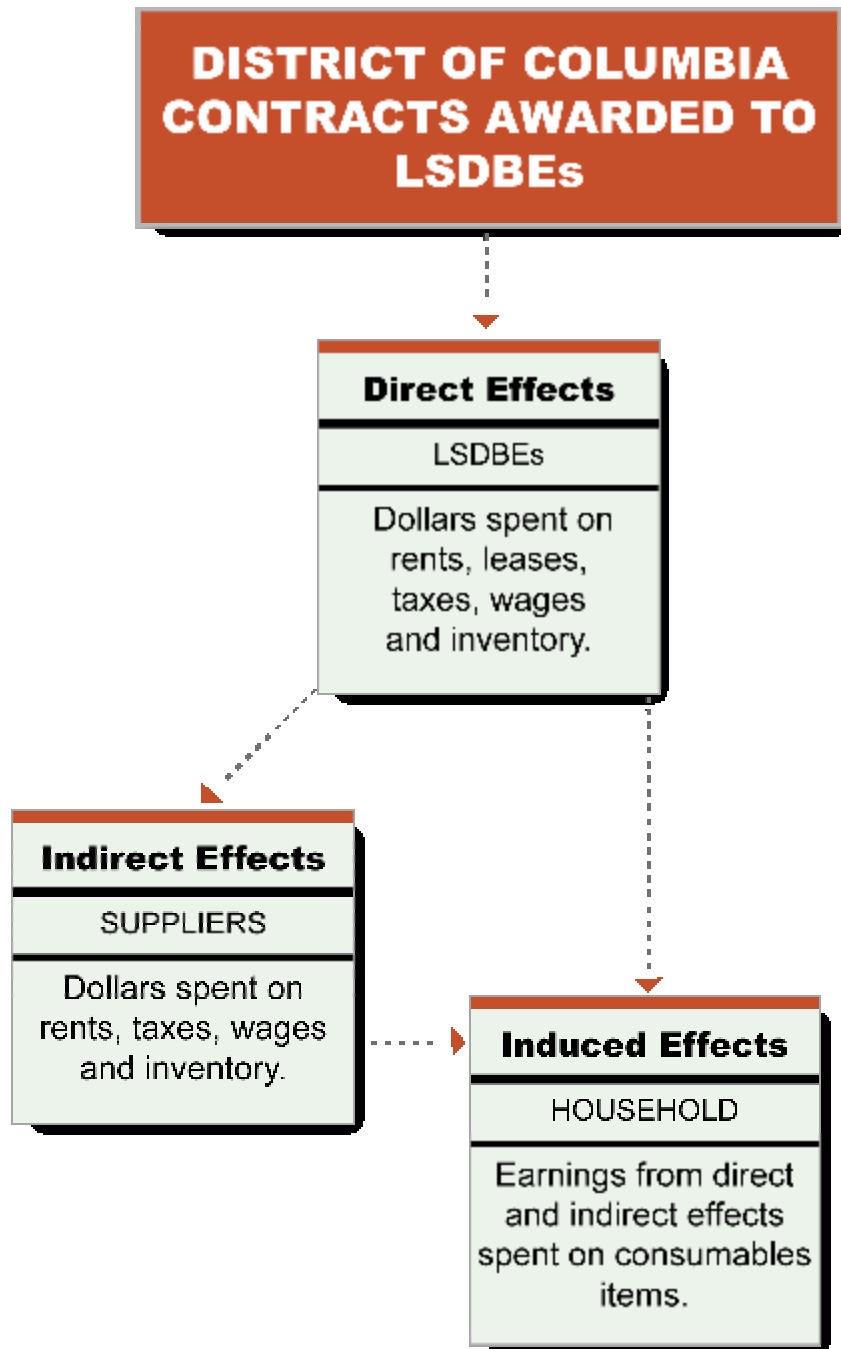
The LSDBE Payment data set provided by the OLBD was grouped by industry sector at the two-digit SIC code level. These values were input into the full 525-industry sector IMPLAN Pro 2 model for the year 1999 (latest version available; the full model is generally equivalent to the three-digit SIC level of detail), and with two exceptions (explained below) it was possible to associate the SIC sector values with specific IMPLAN model sectors. The reason for using the full-sized IMPLAN model was to allow full capture of the secondary impacts of the awards (aggregating the IMPLAN model to the 2-digit SIC level tends to reduce the extent of multiplier effects at the indirect and induced effect stages of the impact process).

Table 1 in Appendix A presents the awards data and sectoring scheme used to transfer the two-digit SIC-based data into the IMPLAN model. In two instances there was not a one-for-one equivalent of the two-digit SIC sectoring scheme with the IMPLAN system. The two-digit SIC sector #49, electric, gas, and sanitation services, with a total value of \$4,129,443, could be allocated among the individual IMPLAN sectors for those services (# 443, 444, and 446). That value was divided equally among three IMPLAN public utility sectors, with each being allocated a value of \$1,376,481. The actual contracts were undoubtedly divided differently, but spreading the total value evenly among the IMPLAN sector made for a somewhat greater degree of accuracy in estimating the multiplier effects.

The second exception occurred with wholesale trade. The LSDBE Payment data set specified two types of wholesale trade contracts: durable (SIC 50) and non-durable (SIC 51) goods, with a combined value of \$76,573,977. The IMPLAN model has only one sector for wholesale trade (#447), so the entire amount was assigned to that sector.



Chart: 1: IMPLAN Economic Model



One further adjustment was made to the LSDBE Payment data set. The contracts awarded for printing and publishing, petroleum and coal products, wholesale trade, and retail trade needed to be adjusted in order to subtract the costs of production and transportation of the goods from the final value of merchandise sold to the District government. The money paid by wholesalers and retailers to manufacturers and importers for their resale goods mostly goes to non-District-based enterprises, and therefore makes no contribution to the District economy. It is the trade markup, or commercial margin, imposed by the wholesale and retail businesses within the District on the value of goods delivered to their establishments to cover their costs of labor, rent, advertising, capital, sales taxes, etc., that generates benefits for the District economy.

The IMPLAN model can be instructed to pick up just the commercial margin portion of the wholesale and retail sectors' sales, so as not to overstate the contribution of those sectors to the value of economic activity in the District. On the basis of economic data from the Census Bureau and other sources, the model estimated that approximately \$64.1 million of the \$493.35 million gross value of contract sales was the CIF³ cost of goods sold, leaving a net value of \$429.26 million as the amount of money spent by the District on LSDBE contracts that could be expected to contribute to local economic activity.

C. Summary Results

Table 7 presents a summary of the modeling results. It shows the values for the direct, indirect, induced, and cumulative total stages of the impact process.

Table 7 Summary of LSDBE Economic Impacts

District of Columbia LSDBE Program Impacts: Summary					
Parameter	Impact				Multiplier
	Direct	Indirect	Induced	Total	
	(Values in millions of 1999 dollars)				
Total Output	\$429.26	\$116.30	\$119.25	\$664.80	1.55
Total Value Added	\$249.55	\$77.17	\$103.01	\$429.73	1.72
Total Labor Income	\$192.03	\$56.12	\$78.40	\$326.54	1.70
Total Employee Compensation	\$192.03	\$56.12	\$78.40	\$326.54	1.70
Total Proprietors' Income	\$11.53	\$3.73	\$1.06	\$16.32	1.42
Total Other Property Type Income	\$47.93	\$16.62	\$22.05	\$86.60	1.81
Total Indirect Business Taxes	\$9.59	\$4.43	\$2.57	\$16.58	1.73
Total Direct and Indirect Taxes				\$66.51	
Total Employment*	4,501	989	1,582	7,073	1.57
* Person-years of full- and part-time jobs.					

* Person-years of full- and part-time jobs.

³ CIF= Cost, insurance and freight (i.e. delivered cost, before local markup) of goods purchased before resale.



Overall, for every dollar expended under a LSDBE contract, about 55 cents of secondary gross sales output of goods and services was generated in the District. About one secondary job in the District resulted for every two jobs created by the program's LSDBE awards. Every dollar in direct labor income to employees and proprietors generated by LSDBE contracts meant an additional \$0.70 of secondary labor income was generated in the District's economy. A total of \$66.5 million in direct and indirect tax revenues was generated, of which approximately \$19.4 million was estimated to have accrued to the District government.

D. Detailed Results

Attached to this report is Appendix A, which contains the detailed results of the IMPLAN modeling. It presents the modeling results for each of the concepts of input-output analysis: Output, Value Added, Labor Income (followed by its components Employee Compensation and Proprietors' Income), Other Property Type Income, Indirect Business Taxes, and Employment. The final table presents the IMPLAN Tax Impacts report, which provides estimates of both direct and indirect tax payments and receipts by payer and payee.

The tables presenting the individual input-output concepts have the results grouped at the two-digit SIC level of detail, and shows the distribution of impacts for the direct, indirect, induced, and cumulative total stages of the multiplier effect. The reader can see the gradual diffusion of the impacts of the initial direct effect. As noted earlier, the study focused on contract awards for a two-year period (October 1, 1999 through September 30, 2001), so the numbers in the tables reflect a cumulative accretion of effects. In particular, the employment effects should be regarded as person-years of full- and part-time work created and supported by the spending of businesses, institutions, and households' direct and secondary income earned from the LSDBE program. The multiplier effects continue as long as the direct procurements by the District under the contracts continue. Those effects terminate, however, when the program ends. The stimulative effects of the contracts eventually dissipate due to the loss of incremental household buying power to savings, taxes, and transfers and purchases outside the District economy.

E. Tax Impacts

The IMPLAN model Tax Impact report is based on a concept called a Social Accounts Matrix (SAM), which accounts for all the money transactions among the institutions that comprise an area's economy — households, enterprises, and governments. The data sets supplied by the Minnesota IMPLAN Group contain a SAM for each study area, which can be single or multiple aggregations of counties throughout the United States (including the District of Columbia). A subset of the database contains the tax payments from households and enterprises to the federal and local governments, which are shown in Table 8.

According to the IMPLAN model, taxes associated with the cash flows generated by the LSDBE contracts amounted to \$66.51 million. Of this sum, taxes associated with employee compensation



totaled \$30.60 million (mostly Social Security payments by employers and employees to the federal government). Self-employed proprietors paid another \$0.8 million into Social Security. Individuals (i.e., households) paid \$10.5 million in direct taxes, of which \$7.06 million went to the federal government and \$3.43 million went to the District of Columbia government. Of that latter sum, about two-thirds (\$2.42 million) was in the form of personal income taxes. Enterprises paid corporate income taxes totaling \$8.04 million — \$6.78 million to the federal government and \$1.26 million to the District of Columbia. Finally, indirect business taxes paid by individuals and other institutions on purchases of taxable goods and services, and for a variety of fees and charges, paid a total of \$16.58 million, of which the federal government received \$2.46 million and the D.C. government received \$14.13 million, mostly in the form of sales and property taxes. In sum, the District government's revenues deriving from the LSDBE program awards amounted to an estimated \$19.36 million over the two-year period studied.

Table 8 Summary of LSDBE Tax Impacts

State/Local Govt NonEducation Tax Transfers	Employee Compensation	Household Expenditures	Enterprises (Corporations)	Indirect Business Taxes	Total
Corporate Profits Tax			\$1,256,424.00		\$1,256,424.00
Indirect Bus Tax: Motor Vehicle Lic				\$52,435.00	\$52,435.00
Indirect Bus Tax: Other Taxes				\$863,679.00	\$863,679.00
Indirect Bus Tax: Property Tax				\$6,372,432.00	\$6,372,432.00
Indirect Bus Tax: S/L NonTaxes				\$67,311.00	\$67,311.00
Indirect Bus Tax: Sales Tax				\$6,773,008.00	\$6,773,008.00
Personal Tax: Estate and Gift Tax					\$0.00
Personal Tax: Income Tax		\$2,417,114.00			\$2,417,114.00
Personal Tax: Motor Vehicle License		\$39,430.00			\$39,430.00
Personal Tax: NonTaxes (Fines- Fees)		\$930,786.00			\$930,786.00
Personal Tax: Other Tax (Fish/Hunt)					\$0.00
Personal Tax: Property Taxes		\$37,936.00			\$37,936.00
Social Ins Tax- Employee Contribution	\$108,381.00				\$108,381.00
Social Ins Tax- Employer Contribution	\$439,227.00				\$439,227.00
Total	\$547,608.00	\$3,425,265.00	\$1,256,424.00	\$14,128,865.00	\$19,358,162.00

VI. LSDBE PROGRAM STRENGTHS AND WEAKNESSES

Interviews conducted with OLBD and OCP staff and a focus group with LSDBEs identified several positive elements of the LSDBE Program and areas where the Program could be enhanced. Additional information was gleaned from a review of OLBD documents.



A. Program Strengths

1. Program Staff

The Office of Local Business Development is staffed with experienced professionals and organized to fulfill the requirements of the Equal Opportunity for Local, Small and Disadvantaged Business Enterprise Act of 1998, D.C. Law 12-268. In the three years since the last cost benefit analysis report, the director of OLBD has increased agency accountability to the LSDBE program. OLBD is now computerized with systems in place for tracking LSDBE contract awards, monitoring agency compliance, conducting outreach and providing certification. A web site is also maintained to provide information to their target market. The OLBD's direct assistance to LSDBEs is acknowledged to have been the catalyst to increased contracting opportunities for certified businesses.

2. LSDBE Database

The OLBD maintains a LSDBE database. The database tracks LSDBE contract awards and is used to monitor agency goal attainment. The database can generate both automated and customized reports. Because the database is relational, it is scalable and can expand to meet LSDBE program needs. In a relational database, data is stored in separate tables that can be linked with each other. Additionally, data entry is simple because one data entry form can input data into several different tables.

3. LSDBE Program Web site

A web site with information on the LSDBE Program is maintained by OLBD. Viewers can download a LSDBE certification application, located certified LSDBE vendors, link to resources and learn of upcoming events.

4. Overall LSDBE Goal Attainment

LSDBE participation has risen significantly since the previous cost benefit analysis report. With improved program procedures and tools, and more rigorous agency monitoring and staff commitment, 53 agencies have reported their LSDBE participation FY 2000 and 2001. The two fiscal years prior to this study period, FY 1998 and 1999, only 31 agencies reported LSDBE participation.



B. Program Weaknesses

1. Contract Monitoring

There are three sources of contract information regarding the LSDBE Program. OCP tracks prime contract awards made through its office. The agencies submit prime contract records quarterly to OLBD, some include OCP awards and some do not. OLBD gets payment information from the Office of the Chief Financial Officer. However, it was not possible to reconcile the contract records in the three sources because none of the three sources area a unique data set.. None of the sources are tracking subcontractor awards or payments. Additionally, none of the sources identified which contracts were granted bid discounts/evaluation credits or the level of preference.

2. Contract Reporting

The reported information did not differentiate between expendable budget funds and other funding sources. Some agencies included federal funded awards in their goal attainment calculations, although LSDBE goals were only applied to an agencies' expendable budget. There were also awards to not for profit businesses that were included in the OCP data.

3. Contractor Participation

Some LSDBEs reported being substituted out of projects without notice or being listed as subcontractors without being notified. Assistant Chief Contracting Officers report that contract participation monitoring is not done routinely or according to a standard. The LSDBE Program data does not captures LSDBE subcontracting awards.

4. Small Business Set Asides

The set-aside program provides for limited competition among LSDBEs with gross revenues of \$1 million or less. Within OCP there is no formal procedure for setting aside contracts for LSDBE participation. Furthermore, the data provided did not identify which contracts, if any, were set aside for small businesses.

5. Small Business Size Standards

The LSDBE size standards are proscribed by DC Law 12-268. However those size standards do not reflect the profile of businesses in the District of Columbia that are small. According to US Census data, 75.87 percent of the businesses in the Washington D.C. Metropolitan Statistical Area have annual gross receipts less than \$1 million dollars. In the District of Columbia, 92.67 percent of companies have less than 50 employees.



VII. RECOMMENDATIONS

Great strides have been made in the implementation of the Local Small Disadvantaged Business Enterprise Program. The District provides a wide range of contracting opportunities to support the development of LSDBEs. OLBD has been far-reaching in its efforts to ensure that all businesses have an equitable opportunity to participate in District contracts. The quantitative evidence indicates that 45 percent of the agencies have achieved their goal of awarding 50 percent of the expendable budget to LSDBEs. Most others have exceeded the 50 percent goal albeit with expenditures from both their expendable and federal budget.

However, the qualitative evidence indicate areas where there could be program enhancements. Recommendations are offered to enhance opportunities for LSDBEs to receive District contracts, to maximize the use of LSDBEs and allow them more opportunities to compete for contracts without the disadvantage of going against large businesses. They include techniques for contract monitoring, tracking and reporting and best management practices enhance the LSDBE Program.

A. LSDBE Utilization

The following recommendations are designed to increase opportunities for LSDBEs in District contracting. Implementing these program enhancements will help ensure that all District agencies consistently meet the 50 percent LSDBE goal.

1. Small Business Size Standards

The District's current size standards should be modified to reflect the current profiles of small businesses. For example, according the 1999 U.S. Census County Business Patterns, the District of Columbia has 329 total construction firms and only 38 firms (or 11.55 percent) have more than 50 employees. Forty-seven percent have fewer than five employees.

According to the 1997 U.S. Economic Census, for the entire Washington D.C. Metropolitan Statistical Area (MSA), 76.65 percent of the construction firms have annual gross receipts of less than \$1 million dollars. Although these available statistics are for the Washington D.C. MSA, the dramatic difference between the District small business size standards and the average business size in the region would suggest that the District reassess its size standards.

Even the U.S. Small Business Administration (SBA) size standards for small businesses, defined in 13 CFR 121, are lower than the District. Table 9 compares the District's size standards to the SBA standards for construction firms. This comparison was limited to construction where there is a direct correlation between the District's and the SBA's standards.



Table 9 Small Business Enterprise Size Standard Comparison

Industry	District Size Threshold	SBA Size Threshold
Heavy (streets, highways, bridges, etc.)	\$23 million	\$17 million
Building (general construction, etc.)	\$21 million	\$17 million

Economic evidence indicates that most local construction firms are well below the \$23 million and the 21 million thresholds set by the District. The District should consider conducting research to determine the profile of small businesses in all industries and set size standards based on that research.

2. Small Business Set Asides

The District should consider devising a standard method for setting aside individual contracts for small businesses. One such method is a small contract rotation.

In a small contract rotation, a selected number of informal contracts should be set aside for competition between LSDBEs. Firms would pre-qualify for the program by applying for LSDBE certification. Contract awards would be rotated among the pre-qualified firms.

B. Contract Tracking and Monitoring

1. Agency Reporting

Contract awards should be coded by funding source so that federal contracts are not included in an agency's LSDBE goal attainment report as if awarded under the expendable budget. Goal attainment reports should be modified to indicate LSDBE spending that is not mandated by the LSDBE Program, such as capital improvements and federally funded contracts. Awards to not for profit businesses should be excluded from the goal attainment report. LSDBE contract records should note if a bid discount or evaluation credit was applied and the value of that preference. OLBD has begun efforts to identify funding services, however, improvement is still needed.

The agency quarterly reports should be posted to the OLBD web site or otherwise made public. Agencies that fail to report or meet the LSDBE goals should be noted in the published report. The director of an agency that does not report LSDBE goal attainment should submit a report explaining the failure to do so. District should explore the feasibility of assessing a fee to cover the cost for OLBD to compile LSDBE data for agencies that do not report goal attainment.



2. Contractor Participation Monitoring

LSDBEs report being used by non-LSDBE to meet contract goals. Goal attainment through the use of subcontractors requires monitoring. Contract participation monitoring would ensure that LSDBE subcontractors are paid at a level commensurate with their award. To ensure that prime contractors comply with program requirements, the following program components are recommended:

- Confer directly with subcontractors on a regular basis to verify payment information.
- Penalize prime contractors for non-compliance with program requirements.
- Fine prime contractors for non-approved substitutions.
- Include a provision for liquidated damages if a contract is breached due to non-compliance with LSDBE requirements.

3. Subcontractor Substitution

Contractors should be required to maintain the LSDBE subcontractor percentages as indicated at the time the contract was awarded throughout the term of the contract. No substitution should be made of a listed subcontractor, trucker, manufacturer, supplier, or owner-operator of equipment without their prior written approval. A subcontractor substitution should be approved only on the following conditions:

- A written statement from the subcontractor agreeing to the substitution;
- When the subcontractor has been given a reasonable opportunity to execute the subcontract, yet fails to or refuses to execute the subcontract;
- When the subcontractor becomes insolvent; or
- If the subcontractor is substantially and unduly delaying or disrupting the progress of work.

C. Summary

This report shows that the LSDBE Program as mandated by the Equal Opportunity for Local, Small, and Disadvantaged Business Enterprises Act of 1998, D.C. Law 12-268 is having significant success in achieving its goal of providing opportunities for LSDBEs to participate in District contracts. Since the last assessment the number of reporting agencies reporting LSDBE utilization has increased notably. There are 27 agencies did not spend 50 percent of their expendable budget during the reporting period. However, several of those agencies that did not meet their LSDBE goal in fiscal year 2000 did meet their LSDBE goal in fiscal year 2001.

Some agencies made notable awards to LSDBEs but did not report the awards funded by their expendable budget separate from those funded with other dollars. Thus it is not possible to assess compliance with the 50 percent goal. It is also not possible to assess the cost incurred through bid discounts because neither the contracts that received a discount nor the value of those discounts



was reported. Consequently, the only measurable cost was the LSDBE program operating budget. This data was insufficient to measure the total LSDBE program cost.

Although the District may have paid more for construction, and goods and services contracts with LSDBEs by granting bid discounts, the economic benefits of those expenditures translated into local jobs, revenue for businesses and income for residents as well as tax revenue for the District. The benefits of the LSDBE program outweigh the measurable program cost. The impact analysis indicated that for every dollar expended under a LSDBE contract, about 55 cents of gross sales output of goods and services was generated in the District. The LSDBEs contract awards generated an estimated \$19.4 million in tax revenue to the District government. Finally, this report recommends improved reporting standards, to generate that data needed to perform a cost analysis. It also recommends program enhancements such as contract participation monitoring procedures and subcontracting substitution criteria to ensure the continued success of the LSDBE Program.



APPENDIX A:

IMPLAN ECONOMIC IMPACT TABLES

District of Columbia LSDBE Program Tax Impacts
Table 1

Parameter	Impact				Multiplier
	Direct	Indirect	Induced	Total	
	(Values in million 1999 dollars)				
Total Output	\$429.26	\$116.30	\$119.25	\$664.80	1.55
Total Value Added	\$249.55	\$77.17	\$103.01	\$429.73	1.72
Total Labor Income	\$192.03	\$56.12	\$78.40	\$326.54	1.70
Total Employee Compensation	\$192.03	\$56.12	\$78.40	\$326.54	1.70
Total Proprietors' Income	\$11.53	\$3.73	\$1.06	\$16.32	1.42
Total Other Property Type Income	\$47.93	\$16.62	\$22.05	\$86.60	1.81
Total Indirect Business Taxes	\$9.59	\$4.43	\$2.57	\$16.58	1.73
Total Direct and Indirect Taxes				\$66.51	
Total Employment*	4,501	989	1,582	7,073	1.57

* Person-years of full- and part-time jobs.

Total value of LSDBE contracts (\$ mil.)	\$493.35
- Net economic value (less margins)	<u>\$429.26</u>
= mfgs cost of retail goods sold	<u><u>\$64.09</u></u>

District of Columbia LSDBE Program Tax Impacts**Table 2****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Farms (AGG)	986,091	45,126	14,159	1,045,377
Metal mining (AGG)	0	1,286	190	1,476
Coal Mining	0	0	0	0
Oil mining (AGG)	1,961	99,555	17,607	119,123
Non-metal mining (AGG)	0	174	7	181
Construction (AGG)	83,357,040	1,168,585	2,340,164	86,865,792
Food processing (AGG)	0	105,064	133,597	238,661
Tobacco mfg (AGG)	0	27	5,400	5,427
Textiles (AGG)	0	253	2,915	3,168
Apparel (AGG)	0	548	17,040	17,588
Wood products (AGG)	0	189,689	9,755	199,444
Furniture (AGG)	0	2,541	17,442	19,984
Pulp and paper (AGG)	0	13,140	1,245	14,385
Printing and publishing (AGG)	498,532	2,260,839	354,426	3,113,797
Chemicals and allied (AGG)	533	597,118	115,010	712,661
Petroleum products (AGG)	50,678	316,728	79,385	446,791
Rubber products (AGG)	0	94	10	104
Leather products (AGG)	0	0	0	0
Stone, glass and clay (AGG)	0	3,786	223	4,009
Primary metals (AGG)	17	4,508	310	4,835
Fabricated metal (AGG)	0	1,554	118	1,673
Industrial machinery (AGG)	0	38,682	48,181	86,864
Electrical equipment (AGG)	0	557,656	747,717	1,305,372
Transportation equipment (AGG)	0	4,630	105,501	110,132
Scientific instruments (AGG)	0	32,774	11,874	44,647
Miscellaneous mfg (AGG)	0	11,041	1,432	12,473
Railroads and Related Services	252	281,662	148,061	429,975
Local, Interurban Passenger Transit	152,678	77,488	37,723	267,889
Motor Freight Transport and Warehousing	22,908,180	2,979,110	231,699	26,118,990
Water Transportation	10,068	117,883	61,253	189,204
Air Transportation	364	126,081	58,815	185,259
Pipe Lines, Except Natural Gas	285	0	0	285
Transportation Services (AGG)	1,417,528	742,834	58,722	2,219,084
Communications (AGG)	1,446,946	8,818,771	1,470,661	11,736,379
Utilities (AGG)	3,493,462	1,230,832	903,558	5,627,853
Wholesale Trade	16,121,866	5,212,690	1,867,262	23,201,818
Retail Trade (AGG)	7,527,614	1,850,464	4,972,157	14,350,234
Banking	976,457	4,772,372	1,949,296	7,698,125
Credit Agencies	0	2,521,545	500,366	3,021,912
Security and Commodity Brokers	0	2,643,443	616,448	3,259,891
Insurance Carriers	4,494,087	800,594	1,623,441	6,918,122
Insurance Agents and Brokers	0	954,279	292,599	1,246,877
Real estate (AGG)	746,821	10,611,097	7,551,283	18,909,200
Hotels and Lodging Places	1,449,464	1,809,126	676,583	3,935,173
Personal services (AGG)	249,521	217,677	595,169	1,062,366
Business services (AGG)	118,061,448	27,568,836	3,862,184	149,492,464

District of Columbia LSDBE Program Tax Impacts**Table 2****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Automotive services (AGG)	607,787	544,025	169,635	1,321,447
Repair services (AGG)	6,775	373,809	47,005	427,589
Motion Pictures	0	360,199	172,428	532,627
Recreation services (AGG)	0	763,884	620,034	1,383,919
Health services (AGG)	108,801,624	65,058	6,168,763	115,035,440
Legal Services	5,532,005	2,993,937	880,048	9,405,990
Education services (AGG)	7,799	280,321	2,126,440	2,414,560
Social services (AGG)	0	107,669	1,088,422	1,196,092
Non-profit organizations (AGG)	0	833,313	753,304	1,586,617
Professional services (AGG)	47,985,016	26,854,488	2,511,833	77,351,336
State & local non-ed government (AGG)	192,051	934,228	6,693,641	7,819,921
Federal non-military (AGG)	1,735,204	3,393,073	56,401,528	61,529,804
Special sectors (AGG)	0	0	0	0
Federal Government - Military	0	0	7,787,735	7,787,735
State & Local Government - Education	0	0	2,200,639	2,200,639
Domestic Services	0	0	124,253	124,253
Institutions (AGG)	437,724	0	0	437,724
Total Output Impacts	429,257,878	116,296,186	119,246,696	664,800,757

District of Columbia LSDBE Program Tax Impacts**Table 3****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Ag Services (AGG)	720,297	28,184	9,381	757,862
Metal mining (AGG)	0	904	133	1,038
Coal Mining	0	0	0	0
Oil mining (AGG)	1,321	65,163	11,531	78,015
Non-metal mining (AGG)	0	114	4	118
Construction (AGG)	45,360,932	662,107	972,178	46,995,220
Food processing (AGG)	0	38,779	50,059	88,838
Tobacco mfg (AGG)	0	10	2,078	2,088
Textiles (AGG)	0	153	2,051	2,205
Apparel (AGG)	0	74	2,335	2,409
Wood products (AGG)	0	82,559	4,256	86,814
Furniture (AGG)	0	997	7,046	8,042
Pulp and paper (AGG)	0	2,757	341	3,098
Printing and publishing (AGG)	263,621	1,260,036	190,447	1,714,105
Chemicals and allied (AGG)	281	317,281	69,868	387,430
Petroleum products (AGG)	11,506	77,253	18,176	106,935
Rubber products (AGG)	0	32	3	35
Leather products (AGG)	0	0	0	0
Stone, glass and clay (AGG)	0	2,117	149	2,266
Primary metals (AGG)	8	2,236	124	2,367
Fabricated metal (AGG)	0	888	73	961
Industrial machinery (AGG)	0	17,689	22,692	40,381
Electrical equipment (AGG)	0	318,416	425,477	743,892
Transportation equipment (AGG)	0	1,972	45,290	47,262
Scientific instruments (AGG)	0	10,654	3,927	14,580
Miscellaneous mfg (AGG)	0	5,547	714	6,261
Railroads and Related Services	150	167,325	87,957	255,432
Local, Interurban Passenger Transit	90,391	45,876	22,333	158,601
Motor Freight Transport and Warehousing	9,832,230	1,278,639	99,446	11,210,315
Water Transportation	2,739	32,069	16,664	51,472
Air Transportation	254	87,882	40,995	129,131
Pipe Lines, Except Natural Gas	254	0	0	254
Transportation Services (AGG)	1,051,790	550,784	43,362	1,645,936
Communications (AGG)	855,272	5,173,992	864,718	6,893,982
Utilities (AGG)	2,083,740	858,132	627,639	3,569,512
Wholesale Trade	11,439,961	3,698,888	1,324,996	16,463,844
Retail Trade (AGG)	4,916,321	1,371,201	3,689,047	9,976,569
Banking	612,908	2,995,550	1,223,546	4,832,004
Credit Agencies	0	1,960,793	389,093	2,349,885
Security and Commodity Brokers	0	2,013,824	469,622	2,483,446
Insurance Carriers	2,969,812	529,054	1,072,813	4,571,679
Insurance Agents and Brokers	0	706,203	216,534	922,737
Real estate (AGG)	535,524	7,608,914	5,659,262	13,803,700
Hotels and Lodging Places	990,091	1,235,767	462,156	2,688,015
Personal services (AGG)	112,123	150,591	357,670	620,384
Business services (AGG)	70,207,704	19,354,688	2,724,002	92,286,392

District of Columbia LSDBE Program Tax Impacts**Table 3****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Automotive services (AGG)	330,175	332,945	107,681	770,801
Repair services (AGG)	3,492	191,176	22,426	217,094
Motion Pictures	0	161,709	77,410	239,119
Recreation services (AGG)	0	475,127	395,097	870,224
Health services (AGG)	65,318,812	39,414	4,212,915	69,571,136
Legal Services	4,256,581	2,303,674	677,150	7,237,405
Education services (AGG)	4,451	191,710	1,576,306	1,772,467
Social services (AGG)	0	73,885	647,592	721,477
Non-profit organizations (AGG)	0	710,872	435,510	1,146,383
Professional services (AGG)	26,382,096	17,328,288	1,598,047	45,308,432
State & local non-ed government (AGG)	89,176	46,667	5,997,518	6,133,361
Federal non-military (AGG)	1,103,888	2,596,246	55,923,324	59,623,460
Special sectors (AGG)	0	0	0	0
Federal Government - Military	0	0	7,787,735	7,787,735
State & Local Government - Education	0	0	2,200,639	2,200,639
Domestic Services	0	0	124,253	124,253
Institutions (AGG)	0	0	0	0
Total Value Added Impacts	249,547,901	77,167,807	103,013,791	429,729,498

District of Columbia LSDBE Program Tax Impacts**Table 4****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Ag Services (AGG)	583,269	19,210	6,869	609,348
Metal mining (AGG)	0	512	76	588
Coal Mining	0	0	0	0
Oil mining (AGG)	484	24,246	4,289	29,019
Non-metal mining (AGG)	0	63	2	66
Construction (AGG)	41,498,932	633,654	875,741	43,008,328
Food processing (AGG)	0	22,927	29,378	52,304
Tobacco mfg (AGG)	0	1	255	256
Textiles (AGG)	0	105	1,599	1,704
Apparel (AGG)	0	64	1,935	1,999
Wood products (AGG)	0	70,492	3,634	74,126
Furniture (AGG)	0	804	5,693	6,498
Pulp and paper (AGG)	0	1,913	198	2,111
Printing and publishing (AGG)	181,174	952,964	140,890	1,275,028
Chemicals and allied (AGG)	151	165,424	35,555	201,131
Petroleum products (AGG)	3,996	25,768	6,282	36,045
Rubber products (AGG)	0	23	2	25
Leather products (AGG)	0	0	0	0
Stone, glass and clay (AGG)	0	1,778	130	1,908
Primary metals (AGG)	6	1,518	80	1,604
Fabricated metal (AGG)	0	539	46	585
Industrial machinery (AGG)	0	15,195	19,066	34,261
Electrical equipment (AGG)	0	157,895	197,055	354,950
Transportation equipment (AGG)	0	1,751	40,967	42,718
Scientific instruments (AGG)	0	9,697	3,522	13,219
Miscellaneous mfg (AGG)	0	3,977	507	4,484
Railroads and Related Services	108	120,705	63,451	184,263
Local, Interurban Passenger Transit	74,137	37,627	18,317	130,081
Motor Freight Transport and Warehousing	7,369,212	958,334	74,534	8,402,080
Water Transportation	1,729	20,245	10,520	32,494
Air Transportation	159	55,095	25,701	80,954
Pipe Lines, Except Natural Gas	37	0	0	37
Transportation Services (AGG)	926,426	473,936	32,197	1,432,559
Communications (AGG)	362,616	2,494,900	402,229	3,259,745
Utilities (AGG)	675,520	241,620	163,023	1,080,163
Wholesale Trade	6,660,637	2,153,587	771,446	9,585,670
Retail Trade (AGG)	3,305,326	860,427	2,333,707	6,499,461
Banking	203,892	996,508	407,028	1,607,427
Credit Agencies	0	2,225,812	441,682	2,667,495
Security and Commodity Brokers	0	1,550,697	361,621	1,912,319
Insurance Carriers	1,623,345	289,189	586,416	2,498,950
Insurance Agents and Brokers	0	617,107	189,216	806,323
Real estate (AGG)	100,678	1,430,468	402,897	1,934,043
Hotels and Lodging Places	602,719	752,274	281,338	1,636,330
Personal services (AGG)	69,854	125,786	285,277	480,918
Business services (AGG)	44,832,964	15,647,604	2,263,593	62,744,164

District of Columbia LSDBE Program Tax Impacts**Table 4****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Automotive services (AGG)	200,361	184,013	60,708	445,082
Repair services (AGG)	2,622	143,913	16,574	163,109
Motion Pictures	0	144,981	69,403	214,384
Recreation services (AGG)	0	402,881	268,349	671,229
Health services (AGG)	53,639,580	32,787	3,827,117	57,499,480
Legal Services	3,929,253	2,126,523	625,078	6,680,853
Education services (AGG)	3,909	183,557	1,562,164	1,749,630
Social services (AGG)	0	73,138	622,496	695,635
Non-profit organizations (AGG)	0	706,371	433,869	1,140,241
Professional services (AGG)	24,565,422	16,096,610	1,492,207	42,154,240
State & local non-ed government (AGG)	50,282	409,404	4,880,585	5,340,272
Federal non-military (AGG)	560,498	2,450,421	47,212,568	50,223,488
Special sectors (AGG)	0	0	0	0
Federal Government - Military	0	0	4,512,786	4,512,786
State & Local Government - Education	0	0	2,200,639	2,200,639
Domestic Services	0	0	124,253	124,253
Institutions (AGG)	0	0	0	0
Total Labor Income Impacts	192,029,298	56,117,040	78,396,760	326,543,102

District of Columbia LSDBE Program Tax Impacts**Table 5****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Ag Services (AGG)	583,269	19,210	6,869	609,348
Metal mining (AGG)	0	512	76	588
Coal Mining	0	0	0	0
Oil mining (AGG)	484	24,246	4,289	29,019
Non-metal mining (AGG)	0	63	2	66
Construction (AGG)	41,498,932	633,654	875,741	43,008,328
Food processing (AGG)	0	22,927	29,378	52,304
Tobacco mfg (AGG)	0	1	255	256
Textiles (AGG)	0	105	1,599	1,704
Apparel (AGG)	0	64	1,935	1,999
Wood products (AGG)	0	70,492	3,634	74,126
Furniture (AGG)	0	804	5,693	6,498
Pulp and paper (AGG)	0	1,913	198	2,111
Printing and publishing (AGG)	181,174	952,964	140,890	1,275,028
Chemicals and allied (AGG)	151	165,424	35,555	201,131
Petroleum products (AGG)	3,996	25,768	6,282	36,045
Rubber products (AGG)	0	23	2	25
Leather products (AGG)	0	0	0	0
Stone, glass and clay (AGG)	0	1,778	130	1,908
Primary metals (AGG)	6	1,518	80	1,604
Fabricated metal (AGG)	0	539	46	585
Industrial machinery (AGG)	0	15,195	19,066	34,261
Electrical equipment (AGG)	0	157,895	197,055	354,950
Transportation equipment (AGG)	0	1,751	40,967	42,718
Scientific instruments (AGG)	0	9,697	3,522	13,219
Miscellaneous mfg (AGG)	0	3,977	507	4,484
Railroads and Related Services	108	120,705	63,451	184,263
Local, Interurban Passenger Transit	74,137	37,627	18,317	130,081
Motor Freight Transport and Warehousing	7,369,212	958,334	74,534	8,402,080
Water Transportation	1,729	20,245	10,520	32,494
Air Transportation	159	55,095	25,701	80,954
Pipe Lines, Except Natural Gas	37	0	0	37
Transportation Services (AGG)	926,426	473,936	32,197	1,432,559
Communications (AGG)	362,616	2,494,900	402,229	3,259,745
Utilities (AGG)	675,520	241,620	163,023	1,080,163
Wholesale Trade	6,660,637	2,153,587	771,446	9,585,670
Retail Trade (AGG)	3,305,326	860,427	2,333,707	6,499,461
Banking	203,892	996,508	407,028	1,607,427
Credit Agencies	0	2,225,812	441,682	2,667,495
Security and Commodity Brokers	0	1,550,697	361,621	1,912,319
Insurance Carriers	1,623,345	289,189	586,416	2,498,950
Insurance Agents and Brokers	0	617,107	189,216	806,323
Real estate (AGG)	100,678	1,430,468	402,897	1,934,043
Hotels and Lodging Places	602,719	752,274	281,338	1,636,330
Personal services (AGG)	69,854	125,786	285,277	480,918
Business services (AGG)	44,832,964	15,647,604	2,263,593	62,744,164

District of Columbia LSDBE Program Tax Impacts**Table 5****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Automotive services (AGG)	200,361	184,013	60,708	445,082
Repair services (AGG)	2,622	143,913	16,574	163,109
Motion Pictures	0	144,981	69,403	214,384
Recreation services (AGG)	0	402,881	268,349	671,229
Health services (AGG)	53,639,580	32,787	3,827,117	57,499,480
Legal Services	3,929,253	2,126,523	625,078	6,680,853
Education services (AGG)	3,909	183,557	1,562,164	1,749,630
Social services (AGG)	0	73,138	622,496	695,635
Non-profit organizations (AGG)	0	706,371	433,869	1,140,241
Professional services (AGG)	24,565,422	16,096,610	1,492,207	42,154,240
State & local non-ed government (AGG)	50,282	409,404	4,880,585	5,340,272
Federal non-military (AGG)	560,498	2,450,421	47,212,568	50,223,488
Special sectors (AGG)	0	0	0	0
Federal Government - Military	0	0	4,512,786	4,512,786
State & Local Government - Education	0	0	2,200,639	2,200,639
Domestic Services	0	0	124,253	124,253
Institutions (AGG)	0	0	0	0
Total Employee Compensation Impacts	192,029,298	56,117,040	78,396,760	326,543,102

District of Columbia LSDBE Program Tax Impacts**Table 6****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Ag Services (AGG)	6	2,097	422	2,525
Metal mining (AGG)	0	0	0	0
Coal Mining	0	0	0	0
Oil mining (AGG)	113	5,680	1,005	6,798
Non-metal mining (AGG)	0	0	0	0
Construction (AGG)	3,414,850	52,386	72,581	3,539,817
Food processing (AGG)	0	84	109	193
Tobacco mfg (AGG)	0	0	0	0
Textiles (AGG)	0	41	527	568
Apparel (AGG)	0	5	148	153
Wood products (AGG)	0	296	15	312
Furniture (AGG)	0	73	499	572
Pulp and paper (AGG)	0	281	29	311
Printing and publishing (AGG)	11,323	59,766	8,852	79,940
Chemicals and allied (AGG)	5	5,609	1,318	6,932
Petroleum products (AGG)	0	0	0	0
Rubber products (AGG)	0	0	0	0
Leather products (AGG)	0	0	0	0
Stone, glass and clay (AGG)	0	332	24	356
Primary metals (AGG)	0	0	0	0
Fabricated metal (AGG)	0	30	3	33
Industrial machinery (AGG)	0	0	0	0
Electrical equipment (AGG)	0	1,985	2,372	4,357
Transportation equipment (AGG)	0	0	0	0
Scientific instruments (AGG)	0	1,794	662	2,457
Miscellaneous mfg (AGG)	0	37	5	41
Railroads and Related Services	0	0	0	0
Local, Interurban Passenger Transit	12,575	6,382	3,107	22,064
Motor Freight Transport and Warehousing	842,119	109,514	8,517	960,151
Water Transportation	28	329	171	528
Air Transportation	4	1,381	644	2,030
Pipe Lines, Except Natural Gas	0	0	0	0
Transportation Services (AGG)	37,393	19,306	1,394	58,093
Communications (AGG)	28,181	199,854	31,964	260,000
Utilities (AGG)	18,663	7,175	4,881	30,719
Wholesale Trade	109,154	35,293	12,642	157,090
Retail Trade (AGG)	21,014	11,374	19,163	51,551
Banking	2,662	13,009	5,314	20,985
Credit Agencies	0	116,460	23,110	139,570
Security and Commodity Brokers	0	22,329	5,207	27,536
Insurance Carriers	0	0	0	0
Insurance Agents and Brokers	0	43,384	13,302	56,686
Real estate (AGG)	31,221	443,596	124,941	599,758
Hotels and Lodging Places	103,541	129,233	48,331	281,106
Personal services (AGG)	17,784	31,768	73,680	123,232
Business services (AGG)	2,049,920	750,257	109,476	2,909,654

District of Columbia LSDBE Program Tax Impacts**Table 6****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Automotive services (AGG)	6,144	5,704	1,868	13,716
Repair services (AGG)	325	17,856	2,067	20,248
Motion Pictures	0	5,914	2,831	8,745
Recreation services (AGG)	0	23,860	15,821	39,680
Health services (AGG)	2,655,899	1,611	173,964	2,831,474
Legal Services	1,260,110	681,975	200,462	2,142,547
Education services (AGG)	39	2,215	19,701	21,955
Social services (AGG)	0	0	0	0
Non-profit organizations (AGG)	0	2,607	4,088	6,695
Professional services (AGG)	905,105	915,093	68,543	1,888,741
State & local non-ed government (AGG)	0	0	0	0
Federal non-military (AGG)	0	0	0	0
Special sectors (AGG)	0	0	0	0
Federal Government - Military	0	0	0	0
State & Local Government - Education	0	0	0	0
Domestic Services	0	0	0	0
Institutions (AGG)	0	0	0	0
Total Proprietors' Income Impacts	11,528,178	3,727,975	1,063,760	16,319,919

District of Columbia LSDBE Program Tax Impacts**Table 7****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Ag Services (AGG)	108,727	7,815	2,133	118,674
Metal mining (AGG)	0	284	40	324
Coal Mining	0	0	0	0
Oil mining (AGG)	705	34,453	6,098	41,256
Non-metal mining (AGG)	0	45	2	47
Construction (AGG)	3,379,892	26,008	80,426	3,486,326
Food processing (AGG)	0	15,161	19,763	34,924
Tobacco mfg (AGG)	0	4	817	821
Textiles (AGG)	0	44	411	454
Apparel (AGG)	0	9	363	371
Wood products (AGG)	0	9,918	511	10,430
Furniture (AGG)	0	175	1,234	1,409
Pulp and paper (AGG)	0	745	131	876
Printing and publishing (AGG)	75,816	275,511	44,669	395,995
Chemicals and allied (AGG)	113	139,811	32,605	172,530
Petroleum products (AGG)	6,556	45,753	10,406	62,714
Rubber products (AGG)	0	8	1	9
Leather products (AGG)	0	0	0	0
Stone, glass and clay (AGG)	0	296	17	313
Primary metals (AGG)	2	630	38	669
Fabricated metal (AGG)	0	333	26	359
Industrial machinery (AGG)	0	2,056	3,087	5,143
Electrical equipment (AGG)	0	154,758	220,449	375,207
Transportation equipment (AGG)	0	165	2,909	3,074
Scientific instruments (AGG)	0	645	284	928
Miscellaneous mfg (AGG)	0	1,443	191	1,635
Railroads and Related Services	35	39,458	20,742	60,236
Local, Interurban Passenger Transit	12,915	6,555	3,191	22,660
Motor Freight Transport and Warehousing	2,136,054	277,785	21,605	2,435,443
Water Transportation	796	9,326	4,846	14,968
Air Transportation	66	22,917	10,690	33,674
Pipe Lines, Except Natural Gas	192	0	0	192
Transportation Services (AGG)	114,196	69,334	9,812	193,343
Communications (AGG)	407,527	2,217,343	382,713	3,007,583
Utilities (AGG)	985,333	463,064	359,696	1,808,093
Wholesale Trade	2,409,442	779,046	279,066	3,467,554
Retail Trade (AGG)	938,441	276,864	737,047	1,952,352
Banking	392,329	1,917,484	783,205	3,093,019
Credit Agencies	0	-408,049	-80,972	-489,021
Security and Commodity Brokers	0	336,563	78,486	415,049
Insurance Carriers	1,052,199	187,443	380,096	1,619,738
Insurance Agents and Brokers	0	78,884	24,187	103,071
Real estate (AGG)	345,974	4,915,721	4,302,056	9,563,750
Hotels and Lodging Places	277,054	345,801	129,324	752,178
Personal services (AGG)	34,745	19,054	58,006	111,804
Business services (AGG)	23,186,960	3,216,465	396,725	26,800,148

District of Columbia LSDBE Program Tax Impacts**Table 7****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Automotive services (AGG)	101,164	118,872	38,346	258,383
Repair services (AGG)	665	35,768	4,157	40,589
Motion Pictures	0	10,617	5,082	15,700
Recreation services (AGG)	0	35,955	95,734	131,689
Health services (AGG)	9,685,370	5,509	327,073	10,017,952
Legal Services	279,762	151,408	44,505	475,676
Education services (AGG)	192	2,889	5,011	8,092
Social services (AGG)	0	425	17,785	18,210
Non-profit organizations (AGG)	0	3,340	557	3,897
Professional services (AGG)	1,413,741	988,868	80,541	2,483,150
State & local non-ed government (AGG)	38,893	-362,737	1,116,933	793,090
Federal non-military (AGG)	543,390	145,824	8,710,757	9,399,971
Special sectors (AGG)	0	0	0	0
Federal Government - Military	0	0	3,274,949	3,274,949
State & Local Government - Education	0	0	0	0
Domestic Services	0	0	0	0
Institutions (AGG)	0	0	0	0
Other Property Type Income Impacts	47,929,246	16,623,866	22,048,562	86,601,670

District of Columbia LSDBE Program Tax Impacts**Table 8****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Ag Services (AGG)	28,302	1,159	379	29,840
Metal mining (AGG)	0	108	17	125
Coal Mining	0	0	0	0
Oil mining (AGG)	132	6,464	1,144	7,740
Non-metal mining (AGG)	0	5	0	5
Construction (AGG)	482,105	2,445	16,010	500,561
Food processing (AGG)	0	691	918	1,609
Tobacco mfg (AGG)	0	5	1,006	1,011
Textiles (AGG)	0	5	42	47
Apparel (AGG)	0	1	37	38
Wood products (AGG)	0	2,149	110	2,259
Furniture (AGG)	0	18	119	136
Pulp and paper (AGG)	0	99	11	111
Printing and publishing (AGG)	6,631	31,561	4,889	43,081
Chemicals and allied (AGG)	17	12,045	1,708	13,770
Petroleum products (AGG)	955	5,733	1,489	8,176
Rubber products (AGG)	0	1	0	1
Leather products (AGG)	0	0	0	0
Stone, glass and clay (AGG)	0	43	2	45
Primary metals (AGG)	0	88	7	95
Fabricated metal (AGG)	0	15	1	17
Industrial machinery (AGG)	0	438	538	976
Electrical equipment (AGG)	0	5,762	7,973	13,735
Transportation equipment (AGG)	0	56	1,414	1,470
Scientific instruments (AGG)	0	312	121	434
Miscellaneous mfg (AGG)	0	126	16	142
Railroads and Related Services	6	7,162	3,765	10,933
Local, Interurban Passenger Transit	3,339	1,695	825	5,859
Motor Freight Transport and Warehousing	326,965	42,520	3,307	372,792
Water Transportation	213	2,499	1,298	4,010
Air Transportation	28	9,870	4,604	14,503
Pipe Lines, Except Natural Gas	25	0	0	25
Transportation Services (AGG)	11,167	7,514	1,352	20,034
Communications (AGG)	85,129	461,748	79,776	626,653
Utilities (AGG)	422,887	153,449	104,920	681,255
Wholesale Trade	2,369,882	766,255	274,484	3,410,621
Retail Trade (AGG)	672,554	233,910	618,292	1,524,756
Banking	16,687	81,558	33,313	131,559
Credit Agencies	0	143,029	28,382	171,411
Security and Commodity Brokers	0	126,564	29,515	156,078
Insurance Carriers	294,268	52,422	106,301	452,991
Insurance Agents and Brokers	0	10,212	3,131	13,343
Real estate (AGG)	88,872	1,262,725	954,310	2,305,907
Hotels and Lodging Places	110,319	137,693	51,495	299,507
Personal services (AGG)	7,524	5,752	14,387	27,662
Business services (AGG)	2,187,781	490,620	63,684	2,742,085

District of Columbia LSDBE Program Tax Impacts**Table 8****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Automotive services (AGG)	28,650	30,059	8,627	67,336
Repair services (AGG)	206	11,496	1,695	13,396
Motion Pictures	0	6,111	2,925	9,036
Recreation services (AGG)	0	36,291	31,014	67,305
Health services (AGG)	1,993,867	1,117	58,725	2,053,709
Legal Services	47,566	25,743	7,567	80,876
Education services (AGG)	350	5,264	9,131	14,745
Social services (AGG)	0	322	7,310	7,632
Non-profit organizations (AGG)	0	1,161	1,084	2,245
Professional services (AGG)	402,932	242,811	25,298	671,041
State & local non-ed government (AGG)	0	0	0	0
Federal non-military (AGG)	0	0	0	0
Special sectors (AGG)	0	0	0	0
Federal Government - Military	0	0	0	0
State & Local Government - Education	0	0	0	0
Domestic Services	0	0	0	0
Institutions (AGG)	0	0	0	0
Indirect Business Taxes Impacts	9,589,359	4,426,901	2,568,468	16,584,729

District of Columbia LSDBE Program Tax Impacts**Table 9****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Ag Services (AGG)	9	2	0	11
Metal mining (AGG)	0	0	0	0
Coal Mining	0	0	0	0
Oil mining (AGG)	0	1	0	2
Non-metal mining (AGG)	0	0	0	0
Construction (AGG)	970	15	20	1,006
Food processing (AGG)	0	1	1	1
Tobacco mfg (AGG)	0	0	0	0
Textiles (AGG)	0	0	0	0
Apparel (AGG)	0	0	0	0
Wood products (AGG)	0	1	0	2
Furniture (AGG)	0	0	0	0
Pulp and paper (AGG)	0	0	0	0
Printing and publishing (AGG)	3	14	2	18
Chemicals and allied (AGG)	0	1	0	1
Petroleum products (AGG)	0	0	0	0
Rubber products (AGG)	0	0	0	0
Leather products (AGG)	0	0	0	0
Stone, glass and clay (AGG)	0	0	0	0
Primary metals (AGG)	0	0	0	0
Fabricated metal (AGG)	0	0	0	0
Industrial machinery (AGG)	0	0	0	0
Electrical equipment (AGG)	0	2	2	4
Transportation equipment (AGG)	0	0	0	0
Scientific instruments (AGG)	0	0	0	0
Miscellaneous mfg (AGG)	0	0	0	0
Railroads and Related Services	0	1	1	2
Local, Interurban Passenger Transit	4	2	1	6
Motor Freight Transport and Warehousing	213	28	2	243
Water Transportation	0	1	0	1
Air Transportation	0	1	1	2
Pipe Lines, Except Natural Gas	0	0	0	0
Transportation Services (AGG)	11	6	1	18
Communications (AGG)	3	22	3	28
Utilities (AGG)	19	5	2	26
Wholesale Trade	92	30	11	132
Retail Trade (AGG)	160	39	107	305
Banking	4	17	7	28
Credit Agencies	0	24	5	29
Security and Commodity Brokers	0	12	3	15
Insurance Carriers	23	4	8	36
Insurance Agents and Brokers	0	8	2	10
Real estate (AGG)	2	30	9	41
Hotels and Lodging Places	15	18	7	40
Personal services (AGG)	3	7	13	23
Business services (AGG)	756	364	50	1,170
Automotive services (AGG)	8	7	2	17
Repair services (AGG)	0	6	1	6

District of Columbia LSDBE Program Tax Impacts**Table 9****Model: DC-1999.iap****2-digit SIC level aggregation****Copyright MIG 2002**

Industry	Direct	Indirect	Induced	Total
Motion Pictures	0	4	2	5
Recreation services (AGG)	0	7	13	20
Health services (AGG)	1,724	1	78	1,803
Legal Services	34	18	5	57
Education services (AGG)	0	5	42	47
Social services (AGG)	0	2	21	23
Non-profit organizations (AGG)	0	12	11	23
Professional services (AGG)	444	234	24	701
State & local non-ed government (AGG)	1	5	104	110
Federal non-military (AGG)	7	32	884	923
Special sectors (AGG)	0	0	0	0
Federal Government - Military	0	0	75	75
State & Local Government - Education	0	0	52	52
Domestic Services	0	0	9	9
Institutions (AGG)	0	0	0	0
Employment Impacts	4,501	989	1,582	7,073

District of Columbia LSDBE Program Tax Impacts
Model: DC-1999.iap
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Table 10

		Employee Compensation	Proprietary Income	Household Expenditures	Enterprises (Corporations)	Indirect Business Taxes	Total
Enterprises (Corporations)	Transfers	300,694					300,694
	Total	300,694	0	0	0	0	300,694
Federal Government NonDefense	Corporate Profits Tax				6,783,156		6,783,156
	Indirect Bus Tax: Custom Duty					468,713	468,713
	Indirect Bus Tax: Excise Taxes					1,601,437	1,601,437
	Indirect Bus Tax: Fed NonTaxes					385,712	385,712
	Personal Tax: Estate and Gift Tax						0
	Personal Tax: Income Tax			7,014,086			7,014,086
	Personal Tax: NonTaxes (Fines- Fees)			48,846			48,846
	Social Ins Tax- Employee Contribution	14,586,463	804,312				15,390,775
	Social Ins Tax- Employer Contribution	15,162,434					15,162,434
	Total	29,748,897	804,312	7,062,932	6,783,156	2,455,863	46,855,160
State/Local Govt NonEducation	Corporate Profits Tax				1,256,424		1,256,424
	Indirect Bus Tax: Motor Vehicle Lic					52,435	52,435
	Indirect Bus Tax: Other Taxes					863,679	863,679
	Indirect Bus Tax: Property Tax					6,372,432	6,372,432
	Indirect Bus Tax: S/L NonTaxes					67,311	67,311
	Indirect Bus Tax: Sales Tax					6,773,008	6,773,008
	Personal Tax: Estate and Gift Tax						0
	Personal Tax: Income Tax			2,417,114			2,417,114
	Personal Tax: Motor Vehicle License			39,430			39,430
	Personal Tax: NonTaxes (Fines- Fees)			930,786			930,786
	Personal Tax: Other Tax (Fish/Hunt)						0
	Personal Tax: Property Taxes			37,936			37,936
	Social Ins Tax- Employee Contribution	108,381					108,381
	Social Ins Tax- Employer Contribution	439,227					439,227
	Total	547,608	0	3,425,265	1,256,424	14,128,865	19,358,162
Grand Total		30,597,199	804,312	10,488,198	8,039,580	16,584,728	66,514,017